

# CALIFORNIA STD TREATMENT GUIDELINES FOR ADULTS AND ADOLESCENTS 2002

These guidelines for the treatment of patients with STDs reflect the 2002 CDC STD Treatment Guidelines and the Region IX Infertility Clinical Guidelines. The focus is primarily on STDs encountered in office practice. These guidelines are intended as a source of clinical guidance; they are not a comprehensive list of all effective regimens. To report STD infections; request assistance with confidential notification of sexual partners of patients with syphilis, gonorrhea, chlamydia or HIV infection; or to obtain additional information on the medical management of STD patients, call the County Health Department. The California STD/HIV Prevention Training Center is an additional resource for training and consultation in the area of STD clinical management and prevention (510-883-6600) or [www.stdhivtraining.org](http://www.stdhivtraining.org).

DISEASE	RECOMMENDED REGIMENS	DOSE/ROUTE	ALTERNATIVE REGIMENS
<b>CHLAMYDIA</b>			
Uncomplicated Infections Adults/Adolescents <sup>1</sup>	<ul style="list-style-type: none"> <li>Azithromycin <b>or</b></li> <li>Doxycycline<sup>2</sup></li> </ul>	1 g po 100 mg po bid x 7 d	<ul style="list-style-type: none"> <li>Erythromycin base 500 mg po qid x 7 d <b>or</b></li> <li>Erythromycin ethylsuccinate 800 mg po qid x 7 d <b>or</b></li> <li>Ofloxacin<sup>3</sup> 300 mg po bid x 7 d <b>or</b></li> <li>Levofloxacin<sup>2</sup> 500 mg po qd x 7 d</li> </ul>
Pregnant Women <sup>3</sup>	<ul style="list-style-type: none"> <li>Azithromycin <b>or</b></li> <li>Amoxicillin <b>or</b></li> <li>Erythromycin base</li> </ul>	1 g po 500 mg po tid x 7 d 500 mg po qid x 7 d	<ul style="list-style-type: none"> <li>Erythromycin base 250 mg po qid x 14 d <b>or</b></li> <li>Erythromycin ethylsuccinate 800 mg po qid x 7 d <b>or</b></li> <li>Erythromycin ethylsuccinate 400 mg po qid x 14 d</li> </ul>
<b>GONORRHEA<sup>4</sup></b>			
Uncomplicated Infections Adults/Adolescents	<ul style="list-style-type: none"> <li>Cefixime<sup>5</sup> <b>or</b></li> <li>Ceftriaxone <b>plus</b><sup>4</sup></li> <li>A chlamydia recommended regimen listed above</li> </ul>	400 mg po 125 mg IM	<ul style="list-style-type: none"> <li>Spectinomycin<sup>4,5</sup> 2 g IM <b>or</b></li> <li>Ciprofloxacin<sup>2,4,6</sup> 500 mg po <b>or</b></li> <li>Ofloxacin<sup>2,4,6</sup> 400 mg po <b>or</b></li> <li>Levofloxacin<sup>2,4,6</sup> 250 mg po <b>or</b></li> <li>Azithromycin<sup>6</sup> 2 g po</li> </ul>
Pregnant Women	<ul style="list-style-type: none"> <li>Ceftriaxone <b>or</b></li> <li>Cefixime<sup>5</sup> <b>plus</b><sup>4</sup></li> <li>A chlamydia recommended regimen listed above</li> </ul>	125 mg IM 400 mg po	<ul style="list-style-type: none"> <li>Spectinomycin<sup>4,5</sup> 2 g IM</li> </ul>
<b>PELVIC INFLAMMATORY DISEASE<sup>7</sup></b>	<b>Parenteral</b> <sup>8</sup>		<b>Parenteral</b> <sup>8</sup>
	<ul style="list-style-type: none"> <li><b>Either</b> Cefotetan <b>or</b> Cefoxitin <b>plus</b> Doxycycline<sup>2</sup> <b>or</b></li> <li>Clindamycin <b>plus</b> Gentamicin</li> </ul>	2 g IV q 12 hrs 2 g IV q 6 hrs 100 mg po or IV q 12 hrs 900 mg IV q 8 hrs 2 mg/kg IV or IM followed by 1.5 mg/kg IV or IM q 8 hrs	<ul style="list-style-type: none"> <li><b>Either</b> Ofloxacin<sup>2,9</sup> 400 mg IV q 12 hrs <b>or</b> Levofloxacin<sup>2,9</sup> 500 mg IV qd <b>plus</b> Metronidazole 500 mg IV q 8 hrs <b>or</b></li> <li>Ampicillin/Sulbactam 3 g IV q 6 hrs <b>plus</b> Doxycycline<sup>2</sup> 100 mg po or IV q 12 hrs</li> </ul>
<b>MUCOPURULENT CERVICITIS<sup>7</sup></b>	<b>Oral/IM</b>		<b>Oral</b>
	<ul style="list-style-type: none"> <li><b>Either</b> Ceftriaxone <b>or</b> Cefoxitin <b>with</b> Probenecid <b>plus</b> Doxycycline<sup>2</sup></li> </ul>	250 mg IM 2 g IM 1 g po 100 mg po bid x 14 d	<ul style="list-style-type: none"> <li><b>Either</b> Ofloxacin<sup>2,9</sup> 400 mg po bid x 14 d <b>or</b> Levofloxacin<sup>2,9</sup> 500 mg po QD x 14 d <b>plus</b> Metronidazole 500 mg po bid x 14 d</li> </ul>
<b>NONGONOCOCCAL URETHRITIS<sup>7</sup></b>	<ul style="list-style-type: none"> <li>Azithromycin <b>or</b></li> <li>Doxycycline<sup>2</sup></li> </ul>	1 g po 100 mg po bid x 7 d	<ul style="list-style-type: none"> <li>Erythromycin base 500 mg po qid x 7 d <b>or</b></li> <li>Erythromycin ethylsuccinate 800 mg po qid x 7 d <b>or</b></li> <li>Ofloxacin<sup>2,9</sup> 300 mg po bid x 7 d <b>or</b></li> <li>Levofloxacin<sup>2,9</sup> 500 mg po qd x 7 days</li> </ul>
<b>EPIDIDYMITIS<sup>7</sup></b>	<p>Likely due to Gonorrhea or Chlamydia</p> <ul style="list-style-type: none"> <li>Ceftriaxone <b>plus</b> Doxycycline</li> </ul> <p>Likely due to enteric organisms</p> <ul style="list-style-type: none"> <li>Ofloxacin<sup>9</sup> <b>or</b></li> <li>Levofloxacin<sup>9</sup></li> </ul>	250 mg IM 100 mg po bid x 10 d  300 mg po bid x 10 d 500 mg po qd x 10 d	
<b>TRICHOMONIASIS<sup>10</sup></b>	<ul style="list-style-type: none"> <li>Metronidazole</li> </ul>	2 g po	<ul style="list-style-type: none"> <li>Metronidazole 500 mg po bid x 7 d</li> </ul>
<b>BACTERIAL VAGINOSIS</b>			
Adults/Adolescents	<ul style="list-style-type: none"> <li>Metronidazole <b>or</b></li> <li>Clindamycin cream<sup>11</sup> <b>or</b></li> <li>Metronidazole gel</li> </ul>	500 mg po bid x 7 d 2%, one full applicator (5g) intravaginally qhs x 7 d 0.75%, one full applicator (5g) intravaginally qd x 5 d	<ul style="list-style-type: none"> <li>Metronidazole 2 g po <b>or</b></li> <li>Clindamycin 300 mg po bid x 7 d <b>or</b></li> <li>Clindamycin ovules 100 g intravaginally qhs x 3 d</li> </ul>
Pregnant Women	<ul style="list-style-type: none"> <li>Metronidazole <b>or</b></li> <li>Clindamycin</li> </ul>	250 mg po tid x 7 d 300 mg po bid x 7 d	
<b>CHANCROID</b>	<ul style="list-style-type: none"> <li>Azithromycin <b>or</b></li> <li>Ceftriaxone <b>or</b></li> <li>Ciprofloxacin<sup>2</sup></li> </ul>	1 g po 250 mg IM 500 mg po bid x 3 d	<ul style="list-style-type: none"> <li>Erythromycin base 500 mg po tid x 7 d</li> </ul>
<b>LYMPHOGRANULOMA VENEREUM</b>	<ul style="list-style-type: none"> <li>Doxycycline<sup>2</sup></li> </ul>	100 mg po bid x 21 d	<ul style="list-style-type: none"> <li>Erythromycin base 500 mg po qid x 21 d <b>or</b></li> <li>Azithromycin 1 g po qd x 21 d</li> </ul>

<sup>1</sup> Annual screening for women age 25 years or younger. Nucleic Acid Amplification Tests (NAATS) are recommended. Women with chlamydia should be rescreened 3-4 months after treatment.

<sup>2</sup> Contraindicated for pregnant and nursing women.

<sup>3</sup> Test-of-cure follow-up is recommended because the regimens are not highly efficacious (Amoxicillin and Erythromycin) or the data on safety and efficacy are limited (Azithromycin).

<sup>4</sup> Co-treatment for chlamydia infection is indicated unless chlamydia infection has been ruled out using sensitive technology or if 2g Azithromycin dose is used.

<sup>5</sup> Not recommended for pharyngeal gonococcal infection.

<sup>6</sup> Test-of-cure follow-up is recommended to ensure patient does not have an untreated infection from a resistant gonorrhea strain.

<sup>7</sup> Testing for gonorrhea and chlamydia is recommended because a specific diagnosis may improve compliance and partner management and these infections are reportable by CA State Law.

<sup>8</sup> Discontinue 24 hours after patient improves clinically and continue with oral therapy for a total of 14 days.

<sup>9</sup> If gonorrhea is documented, test-of-cure follow-up is recommended to ensure patient does not have untreated resistant gonorrhea infection.

<sup>10</sup> If reinfection is ruled out and persistence of trichomonas is documented, evaluate for metronidazole-resistant *T. vaginalis*. Referral to CDC at 770-488-4115.

<sup>11</sup> Might weaken latex condoms and diaphragms because oil-based.



DISEASE	RECOMMENDED REGIMENS	DOSE/ROUTE	ALTERNATIVE REGIMENS
<b>HUMAN PAPILLOMAVIRUS</b>			
External Genital/ Perianal Warts	<b>Patient Applied</b> <ul style="list-style-type: none"> <li>Podofilox<sup>12</sup> 0.5% solution or gel <b>or</b></li> <li>Imiquimod<sup>13</sup> 5% cream</li> </ul> <b>Provider Administered</b> <ul style="list-style-type: none"> <li>Cryotherapy <b>or</b></li> <li>Podophyllin<sup>12</sup> resin 10%-25% in tincture of benzoin <b>or</b></li> <li>Trichloroacetic acid (TCA) <b>or</b></li> <li>Bichloroacetic acid (BCA) 80%- 90% <b>or</b></li> <li>Surgical removal</li> </ul>		<b>Alternative Regimen</b> <ul style="list-style-type: none"> <li>Intralesional interferon <b>or</b></li> <li>Laser surgery</li> </ul>
Mucosal Genital Warts	<ul style="list-style-type: none"> <li>Cryotherapy <b>or</b></li> <li>TCA or BCA 80%-90% <b>or</b></li> <li>Podophyllin<sup>12</sup> resin 10%-25% in tincture of benzoin <b>or</b></li> <li>Surgical removal</li> </ul>	Vaginal, urethral meatus, and anal Vaginal and anal Urethral meatus only Anal warts only	
<b>HERPES SIMPLEX VIRUS<sup>14</sup></b>			
First Clinical Episode of Herpes	<ul style="list-style-type: none"> <li>Acyclovir <b>or</b></li> <li>Acyclovir <b>or</b></li> <li>Famciclovir <b>or</b></li> <li>Valacyclovir</li> </ul>	400 mg po tid x 7-10 d 200 mg po 5/day x 7-10 d 250 mg po tid x 7-10 d 1 g po bid x 7-10 d	
Episodic Therapy for Recurrent Episodes	<ul style="list-style-type: none"> <li>Acyclovir <b>or</b></li> <li>Acyclovir <b>or</b></li> <li>Acyclovir <b>or</b></li> <li>Famciclovir <b>or</b></li> <li>Valacyclovir <b>or</b></li> <li>Valacyclovir</li> </ul>	400 mg po tid x 5 d 200 mg po 5/day x 5 d 800 mg po bid x 5 d 125 mg po bid x 5 d 500 mg po bid x 3-5 d 1 g po qd x 5 d	
Suppressive Therapy	<ul style="list-style-type: none"> <li>Acyclovir <b>or</b></li> <li>Famciclovir <b>or</b></li> <li>Valacyclovir <b>or</b></li> <li>Valacyclovir</li> </ul>	400 mg po bid 250 mg po bid 500 mg po qd 1 g po qd	
<b>HIV Infection<sup>15</sup></b>			
Episodic Therapy for Recurrent Episodes	<ul style="list-style-type: none"> <li>Acyclovir <b>or</b></li> <li>Acyclovir <b>or</b></li> <li>Famciclovir <b>or</b></li> <li>Valacyclovir</li> </ul>	400 mg po tid x 5-10 d 200 mg po 5/day x 5-10 d 500 mg po bid x 5-10 d 1 g po bid x 5-10 d	
Suppressive Therapy	<ul style="list-style-type: none"> <li>Acyclovir <b>or</b></li> <li>Famciclovir <b>or</b></li> <li>Valacyclovir</li> </ul>	400-800 mg po bid-tid 500 mg po bid 500 mg po bid	
<b>SYPHILIS</b>			
Primary, Secondary, and Early Latent	<ul style="list-style-type: none"> <li>Benzathine penicillin G</li> </ul>	2.4 million units IM	<ul style="list-style-type: none"> <li>Doxycycline<sup>2, 16</sup> 100 mg po bid x 2 weeks <b>or</b></li> <li>Tetracycline<sup>2, 16</sup> 500 mg po qid x 2 weeks <b>or</b></li> <li>Ceftriaxone<sup>16</sup> 1 g IM or IV qd x 8-10 d <b>or</b></li> <li>Azithromycin<sup>16</sup> 2 g po</li> </ul>
Late Latent and Unknown duration	<ul style="list-style-type: none"> <li>Benzathine penicillin G</li> </ul>	7.2 million units, administered as 3 doses of 2.4 million units IM, at 1-week intervals	<ul style="list-style-type: none"> <li>Doxycycline<sup>2</sup> 100 mg po bid x 4 weeks <b>or</b></li> <li>Tetracycline<sup>2</sup> 500 mg po qid x 4 weeks</li> </ul>
Neurosypphilis <sup>17</sup>	<ul style="list-style-type: none"> <li>Aqueous crystalline penicillin G</li> </ul>	18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	<ul style="list-style-type: none"> <li>Procaine penicillin G, 2.4 million units IM qd x 10-14 d <b>plus</b> Probenecid 500 mg po qid x 10-14 d <b>or</b></li> <li>Ceftriaxone<sup>16</sup> 2 g IM or IV qd x 10-14 d</li> </ul>
<b>Pregnant Women<sup>18</sup></b>			
Primary, Secondary, and Early Latent	<ul style="list-style-type: none"> <li>Benzathine penicillin G</li> </ul>	2.4 million units IM	<ul style="list-style-type: none"> <li>None</li> </ul>
Late Latent and Unknown duration	<ul style="list-style-type: none"> <li>Benzathine penicillin G</li> </ul>	7.2 million units, administered as 3 doses of 2.4 million units IM, at 1-week intervals	<ul style="list-style-type: none"> <li>None</li> </ul>
Neurosypphilis <sup>17</sup>	<ul style="list-style-type: none"> <li>Aqueous crystalline penicillin G</li> </ul>	18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	<ul style="list-style-type: none"> <li>Procaine penicillin G, 2.4 million units IM q d x 10-14 d <b>plus</b> Probenecid 500 mg po qid x 10-14 d</li> </ul>
<b>HIV Infection</b>			
Primary, Secondary and Early Latent	<ul style="list-style-type: none"> <li>Benzathine penicillin G</li> </ul>	2.4 million units IM	<ul style="list-style-type: none"> <li>Doxycycline<sup>2, 16</sup> 100 mg po bid x 2 weeks <b>or</b></li> <li>Tetracycline<sup>2, 16</sup> 500 mg po qid x 2 weeks</li> </ul>
Late Latent, and Unknown duration <sup>18</sup> with normal CSF Exam	<ul style="list-style-type: none"> <li>Benzathine penicillin G</li> </ul>	7.2 million units, administered as 3 doses of 2.4 million units IM, at 1-week intervals	<ul style="list-style-type: none"> <li>None</li> </ul>
Neurosypphilis <sup>17</sup>	<ul style="list-style-type: none"> <li>Aqueous crystalline penicillin G</li> </ul>	18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	<ul style="list-style-type: none"> <li>Procaine penicillin G, 2.4 million units IM q d x 10-14 d <b>plus</b> Probenecid 500 mg po qid x 10-14 d</li> </ul>

12 Contraindicated during pregnancy.

13 Safety in pregnancy has not been well established.

14 Counseling about natural history, asymptomatic shedding, and sexual transmission is an essential component of herpes management.

15 If lesions persist or recur while receiving antiviral treatment, HSV resistance should be suspected and a viral isolate should be obtained for sensitivity testing.

16 Because efficacy of these therapies has not been established and compliance of some of these regimens difficult, close follow-up is essential. If compliance or follow-up cannot be ensured, then patient should be desensitized and treated with benzathine penicillin.

17 One dose of 2.4 million units of Benzathine penicillin G recommended at completion of neurosyphilis therapy.

18 Patients allergic to penicillin should be treated with penicillin after desensitization.

